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(54) Title: SOLID-PHASE PREPARATION OF [¹⁸F]FLUOROHALOALKANES

(57) **Abstract:** The invention relates to a process for the production of an [¹⁸F]fluorohaloalkane which comprises treatment of a solid support-bound precursor of formula (I): SOLID SUPPORT-LINKER-SO₂-O-(CH₂)_nX (I) wherein n is an integer of from (1) to (7) and X is chloro, bromo or iodo; with ¹⁸F⁻ to produce the [¹⁸F]fluorohaloalkane of formula (II) ¹⁸F-(CH₂)_n-X (II) wherein n and X are as defined for the compound of formula (I), optionally followed by (i) removal of excess ¹⁸F⁻, for example by ion-exchange chromatography; and/or (ii) removal of organic solvent.

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